

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) A method to provide selectable redundant accessor availability in a data storage and retrieval system, comprising the steps of:

providing a data storage and retrieval system comprising one or more data storage devices and an accessor, wherein said accessor comprises a lifting servo section and a first gripper and a second gripper disposed on said lifting servo section;

operating said first gripper;

requesting use of said second gripper;

determining if use of said second gripper is authorized;

if use of said second gripper is authorized, operating said second gripper.

2. (original) The method of claim 1, further comprising the following steps:

providing a software key;

providing said software key to said data storage and retrieval system to authorize the use of said second gripper.

3. (currently amended) A method to provide selectable redundant accessor availability in a data storage and retrieval system, comprising the steps of:

providing a data storage and retrieval system comprising one or more data storage devices, a first accessor, and a second accessor, wherein said first accessor comprises a lifting servo section and a first gripper and a second gripper disposed on said lifting servo section;

operating said first accessor but not said second accessor;

requesting use of said second accessor;

determining if use of said second accessor is authorized;

if use of said second accessor is authorized, operating said second accessor.

4. (original) The method of claim 3, wherein said data storage and retrieval system further comprises at least one of software and firmware to operate said first accessor and said second accessor.

5. (original) The method of claim 3, further comprising the following steps:

providing a software key;

providing said software key to said data storage and retrieval system to authorize the use of said second accessor.

6. (original) The method of claim 3, wherein said requesting step comprises requesting use of said second accessor for cold-standby availability, and wherein said determining step comprises determining if use of said second accessor is authorized for cold-standby availability, and wherein said operating step comprises operating said second accessor for cold-standby availability if use of said second accessor is authorized for cold-standby availability.

7. (original) The method of claim 6, further comprising the following steps:

providing a software key;

providing said software key to said data storage and retrieval system to authorize the use of said second accessor for cold-standby availability;

8. (original) The method of claim 3, wherein said requesting step comprises requesting use of said second accessor for hot-standby availability, and wherein said determining step

comprises determining if use of said second accessor is authorized for hot-standby availability, and wherein said operating step comprises operating said second accessor for hot-standby availability if use of said second accessor is authorized for hot-standby availability.

9. (original) The method of claim 8, further comprising the steps of:

monitoring the operation of said first accessor;

if a failure of said first accessor is detected, operating said second accessor.

10. (original) The method of claim 8, further comprising the following steps:

providing a software key;

providing said software key to said data storage and retrieval system to authorize the use of said second accessor for hot-standby availability.

11. (original) The method of claim 3, wherein said requesting step comprises requesting use of said second accessor for dual-active accessor availability, and wherein said determining step comprises determining if use of said second accessor is authorized for dual-active accessor availability, and wherein said operating step comprises operating said second accessor and said first accessor simultaneously if use of said second accessor is authorized for dual-active accessor availability.

12. (original) The method of claim 11, further comprising the following steps:

providing a software key;

providing said software key to said data storage and retrieval system to authorize the use of said second accessor and said first accessor simultaneously.

13. (currently amended) An article of manufacture comprising one or more data storage devices and an accessor comprising a lifting servo section and a first gripper and a

second gripper disposed on said lifting servo section, and a computer ~~useable~~ readable medium having computer readable program code disposed therein to provide selectable redundant accessor availability, the computer readable program code comprising a series of computer readable program steps to effect:

- operating said first gripper;
- receiving a request to use said second gripper;
- determining if use of said second gripper is authorized;
- if use of said second gripper is authorized, operating said second gripper.

14. (original) The article of manufacture of claim 13, said computer readable program code further comprising a series of computer readable program steps to effect receiving a software key authorizing use of said second gripper.

15. (currently amended) An article of manufacture comprising one or more data storage devices, a first accessor, a second accessor, wherein said first accessor comprises a lifting servo section and a first gripper and a second gripper disposed on said lifting servo section and a computer ~~useable~~ readable medium having computer readable program code disposed therein to provide selectable redundant accessor availability, the computer readable program code comprising a series of computer readable program steps to effect:

- operating said first accessor but not said second accessor;
- receiving a request to use said second accessor;
- determining if use of said second accessor is authorized;
- if use of said second accessor is authorized, operating said second accessor.

16. (original) The article of manufacture of claim 15 further comprising at least one of

software and firmware to operate said first accessor and said second accessor.

17. (original) The article of manufacture of claim 15, said computer readable program code further comprising a series of computer readable program steps to effect receiving a software key to authorize use of said second accessor.

18. (original) The article of manufacture of claim 15, wherein said computer readable program code to receive a request to use said second accessor comprises a series of computer readable program steps to receive a request for cold-standby availability for said second accessor, and wherein said computer readable program code to determine if use of said second accessor is authorized comprises a series of computer readable program steps to determine if use of said second accessor is authorized for cold-standby availability, and wherein said computer readable program code to operate said second accessor comprises a series of computer readable program steps to operate said second accessor for cold-standby availability if use of said second accessor is authorized for cold-standby availability.

19. (original) The article of manufacture of claim 18, said computer readable program code further comprising a series of computer readable program steps to effect receiving a software key to authorize use of said second accessor for cold-standby availability.

20. (original) The article of manufacture of claim 15, wherein said computer readable program code to receive a request to use said second accessor comprises a series of computer readable program steps to receive a request for hot-standby availability for said second accessor, and wherein said computer readable program code to determine if use of said second accessor is authorized comprises a series of computer readable program steps to determine if use of said second accessor is authorized for hot-standby availability, and wherein said

computer readable program code to operate said second accessor comprises a series of computer readable program steps to operate said second accessor for hot-standby availability if use of said second accessor is authorized for hot-standby availability.

21. (original) The article of manufacture of claim 20, said computer readable program code further comprising a series of computer readable program steps to effect:

monitoring the operation of said first accessor;

if a failure of said first accessor is detected, operating said second accessor.

22. (original) The article of manufacture of claim 20, said computer readable program code further comprising a series of computer readable program steps to effect receiving a software key authorizing use of said second accessor for hot-standby availability.

23. (original) The article of manufacture of claim 15, wherein said computer readable program code to receive a request to use said second accessor comprises a series of computer readable program steps to receive a request for dual-active accessor availability, and wherein said computer readable program code to determine if use of said second accessor is authorized comprises a series of computer readable program steps to determine if dual-active accessor availability is authorized, and wherein said computer readable program code to operate said second accessor comprises a series of computer readable program steps to simultaneously operate said first accessor and said second accessor if dual-active accessor availability is authorized.

24. (original) The article of manufacture of claim 23, said computer readable program code further comprising a series of computer readable program steps to effect receiving a software key authorizing dual-active accessor availability.

25. (currently amended) A computer program product embodied in an information storage medium, said computer program product being usable with a programmable computer processor ~~having computer-readable program code embodied therein~~ to provide selectable redundant accessor availability in a data storage and retrieval system comprising one or more data storage devices and an accessor, wherein said accessor comprises a lifting servo section and a first gripper and a second gripper disposed on said lifting servo section, comprising:

computer readable program code which causes said programmable computer processor to operate said first gripper;

computer readable program code which causes said programmable computer processor to receive a request to use said second gripper;

computer readable program code which causes said programmable computer processor to determine if use of said second gripper is authorized;

computer readable program code which, if use of said second gripper is authorized, causes said programmable computer processor to operate said second gripper.

26. (original) The computer program product of claim 25, further comprising computer readable program code which causes said programmable computer processor to receive a software key authorizing use of said first gripper and said second gripper.

27. (currently amended) A computer program product embodied in an information storage medium, said computer program product being usable with a programmable computer processor ~~having computer-readable program code embodied therein~~ to provide selectable redundant accessor availability in a data storage and retrieval system comprising one or more data storage devices, a first accessor, and a second accessor, wherein said first accessor

comprises a lifting servo section and a first gripper and a second gripper disposed on said lifting servo section, comprising:

computer readable program code which causes said programmable computer processor to operate said first accessor but not said second accessor;

computer readable program code which causes said programmable computer processor to receive a request to use said second accessor;

computer readable program code which causes said programmable computer processor to determine if use of said second accessor is authorized;

computer readable program code which, if use of said second accessor is authorized, causes said programmable computer processor to operate said second accessor.

28. (original) The computer program product of claim 27, wherein said data storage and retrieval system further comprises at least one of software and firmware to operate said first accessor and said second accessor.

29. (original) The computer program product of claim 27, further comprising computer readable program code which causes said programmable computer processor to receive a software key authorizing use of said second accessor.

30. (original) The computer program product of claim 27, wherein said computer readable program code to receive a request to use said second accessor comprises computer readable program code which causes said programmable computer processor to receive a request for cold-standby availability for said second accessor, and wherein said computer readable program code to determine if use of said second accessor is authorized comprises computer readable program code which causes said programmable computer processor to

determine if cold-standby availability for said second accessor is authorized, and wherein said computer readable program code to operate said second accessor comprises computer readable program code which, if cold-standby availability for said second accessor is authorized, causes said programmable computer processor to operate said second accessor for cold-standby availability.

31. (original) The computer program product of claim 30, further comprising computer readable program code which causes said programmable computer processor to receive a software key authorizing use of said second accessor for cold-standby availability.

32. (original) The computer program product of claim 27, wherein said computer readable program code to receive a request to use said second accessor comprises computer readable program code which causes said programmable computer processor to receive a request for hot-standby availability for said second accessor, and wherein said computer readable program code to determine if use of said second accessor is authorized comprises computer readable program code which causes said programmable computer processor to determine if hot-standby availability for said second accessor is authorized, and wherein said computer readable program code to operate said second accessor comprises computer readable program code which, if hot-standby availability for said second accessor is authorized, causes said programmable computer processor to operate said second accessor for hot-standby availability.

33. (original) The computer program product of claim 32, further comprising:
computer readable program code which, if hot-standby availability for said second accessor is authorized, causes said programmable computer processor to monitor the operation

of said first accessor;

computer readable program code which, if a failure of said first accessor is detected, causes said programmable computer processor to operate said second accessor.

34. (original) The computer program product of claim 32, further comprising computer readable program code which causes said programmable computer processor to receive a software key authorizing use of said second accessor for hot-standby availability.

35. (original) The computer program product of claim 27, wherein said computer readable program code to receive a request to use said second accessor comprises computer readable program code which causes said programmable computer processor to receive a request for dual-active accessor availability, and wherein said computer readable program code to determine if use of said second accessor is authorized comprises computer readable program code which causes said programmable computer processor to determine if dual-active accessor availability is authorized, and wherein said computer readable program code to operate said second accessor comprises computer readable program code which, if dual-active accessor availability is authorized, causes said programmable computer processor to simultaneously operate said first accessor and said second accessor.

36. (original) The computer program product of claim 35, further comprising computer readable program code which causes said programmable computer processor to receive a software key authorizing simultaneous operation of said first accessor and said second accessor.